CLAIMS:

1. A fertilizer granule comprising:
i) an elemental sulfur and swelling clay matrix, and
ii) at least one additional fertilizer material incorporated into said matrix.

2. The fertilizer granule of claim 1, wherein said additional fertilizer material is selected from the group consisting of ammonium sulfate, urea, potash, ammonium, phosphate and micronutrient fertilizers.

3. The fertilizer granule of claim 1, wherein said at least one additional fertilizer material is a core fertilizer which comprises a core surrounded by said matrix.

4. The fertilizer granule of claim 3 wherein said core fertilizer comprises an ammonium sulfate crystal.

5. The fertilizer granule of claim 1, wherein said additional fertilizer material is a dispersed fertilizer which is dispersed throughout said matrix.

6. The fertilizer granule of claim 4 wherein said dispersed fertilizer comprises ammonium sulfate fines.

7. The fertilizer granule of claim 2, comprising both a core fertilizer and a dispersed fertilizer.

8. The fertilizer granule of claim 2, wherein said micronutrient fertilizers comprise a material selected from the group consisting of iron, copper, zinc, boron, manganese and their oxy-sulfate, sulfate and oxide forms.

9. The fertilizer granule of claim 1 wherein said matrix comprises a sulfur to clay ratio of about 10 to 1 to about 20 to 1 by weight.

10. A process for the preparation of a controlled release fertilizer particle comprising the steps of:

a) preparing a liquefied mixture of sulfur and a swelling clay;

b) transferring said liquefied mixture to a granulator;

c) adding an additional fertilizer material to said granulator; and

d) collecting granules of a predetermined size.

11. The process of claim 10, further comprising the step of blending said additional fertilizer into said liquefied mixture between steps a) and b).

12. The process of claim 10, wherein said granulator is a falling curtain type of granulator.

13. The use of a molten sulfur/ clay slurry to prepare a matrix for the delivery of an additional fertilizer material.

14. The use according to claim 13, wherein said additional fertilizer material is ammonium sulfate fines.

15. A sulfur-based slurry matrix for slowing down rate of release of an incorporated fertilizer component, said slurry comprising:

i) molten sulfur

II) clay, and

iii) ammonium sulfate fines.

16. The use of the slurry matrix of claim 15 to provide a slow release fertilizer product.

17. The slurry matrix of claim 15 wherein said ammonium sulfate fines have an average particle size of less than about 300 microns.

18. The slurry matrix of claim 17 wherein said average particle size is less than about 150 microns.

19. The slurry matrix of claim 17 comprising up to about 50% by weight of said fines.

20. The slurry matrix of claim 15 comprising a sulfur to clay ratio of about 10 to 1 to about 20 to 1 by weight.

21. The use of the slurry matrix of claim 15 in a pastillator to form fertilizer pastilles.

22. The slurry matrix of claim 15 incorporating ammonium sulfate as said fertilizer component.

23. The use of the slurry matrix of claim 15 in a falling curtain granulating drum to form fertilizer granules.